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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,021	02/15/2001	Alexander I. Leyn	CISCP210/3427/887080US	3010

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EXAMINER	
KADING, JOSHUA A	

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 08/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/785,021	LEYN ET AL.	
	Examiner	Art Unit	
	Joshua Kading	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-21 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 15 February 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 11-13-02.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 9-14, and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Woodhead et al. (U.S. Patent 5,640,388).

Regarding claim 1, Woodhead discloses "a system for transmitting a bitstream, the system comprising:

a first communication interface configured to receive the bitstream (figure 5, element 120 shows a first interface receiving the data stream), the bitstream including a timing relationship for data in a portion of the bitstream (col. 18, lines 29-34 where the PCR is the timing relationship for the data in that packet);

a processing apparatus configured to process the data in the bitstream portion in a manner that changes the timing relationship of the data in the bitstream portion (col. 18, lines 27-30 where the "dejitter device" is the processing apparatus that changes the timing relationship as described further in lines 30-col. 19, lines 1-12); and

a second communication interface configured to transmit an output bitstream onto a channel, the output bitstream including the timing relationship for data in the

portion of the bitstream as received by the first communication interface (col. 19, lines 13-57 where the "dejitter device" has a second communication interface 124 as seen in figure 5)."

Regarding claim 2, Woodhead discloses "the system of claim 1 wherein the processing apparatus is further configured to create a timestamp including timing information, the timing information describing the timing relationship of data in the portion of the bitstream (col. 19, lines 5-12 where the new timestamp MPCR is used to adjust for jitter from communication)."

Regarding claim 3, Woodhead discloses "the system of claim 2 further including a synchronization source configured to provide a reference time to the processing apparatus (figure 5, element 132 as described in col. 19, lines 6-8)."

Regarding claim 4, Woodhead discloses "the system of claim 2 wherein the processing apparatus is configured to create the timestamp using timing information that describes the timing relationship of data in a portion of the bitstream as received by the first communication interface (col. 19, lines 5-21)."

Regarding claim 5, Woodhead discloses "the system of claim 2 wherein the processing apparatus is configured to add the timestamp to at least one packet in a set of packets included in the first bitstream (col. 19, lines 5-12 where the new timestamp is

replacing the old timestamp and thus it is added to at least one packet in the bitstream)."

Regarding claim 6, Woodhead discloses "the system of claim 5 wherein the bitstream is an MPEG-2 compressed bitstream and the processing apparatus is configured to add the timestamp to a transport packet in the MPEG-2 bitstream (col. 18, lines 30-col. 19, lines 1-12)."

Regarding claim 7, Woodhead discloses "the system of claim 6 wherein the processing apparatus is configured to replace a synchronization byte in the bitstream with a new synchronization byte (col. 19, lines 5-12 where a PCR by its definition of being a timestamp is used to synchronize the bitstream so that the output matches the input as closely as possible), the new synchronization byte signalling the beginning of payload data for a payload portion of the bitstream (figure 2 shows bitstreams with timestamps and as seen they signal the beginning of the payload of the packet)."

Regarding claim 9, Woodhead discloses "a method for transmitting a bitstream, the method comprising:

providing timing information that describes a timing relationship of data in a portion of the bitstream (col. 18, lines 27-34 where the PCR is a timestamp representing a timing relationship for the payload of the packet);

processing the data in the bitstream portion in a manner that changes the timing relationship of the data (col. 18, lines 34-col. 19, lines 1-12 where the new timestamp MPCR is the changed timing relationship of the data); and

transmitting an output bitstream onto a first channel (col. 18, lines 13-21), the output bitstream including the timing relationship for data in the bitstream (col. 18, line 17-18 where the MPCRs are added to the packet)."

Regarding claim 10, Woodhead discloses "the method of claim 9 further including creating a timestamp including the timing information (col. 19, lines 5-12 where the new timestamp MPCR is the timing information created)."

Regarding claim 11, Woodhead discloses "the method of claim 10 wherein the bitstream includes a set of packets (figure 4 where each shaded box represents a packet) and the method further includes adding the timestamp to at least one packet in the bitstream (col. 19, lines 5-12 where the new timestamp is replacing the old timestamp and thus it is added to at least one packet in the bitstream)."

Regarding claim 12, Woodhead discloses "the method of claim 9 further including receiving the bitstream from a second channel (col. 18, lines 27-40 whereby demultiplexing the bitstream the dejitter device has effectively separated the packets into different channels, including a first and second channel)."

Regarding claim 13, Woodhead discloses, "the method of claim 12 further including restoring the timing relationship of the data in the portion of the bitstream after processing has occurred (col. 19, lines 50-57 whereby the outputted data stream has been restored, as much as possible, to the original transmit timing thus it has been restored after processing)."

Regarding claim 14, Woodhead discloses "the method of claim 9 wherein the bitstream is an MPEG-2 compressed stream (col. 18, lines 30-34)."

Regarding claim 17, Woodhead discloses "the method of claim 14 further including adding one of a stream identifier and a new synchronization byte to the bitstream (col. 19, lines 5-12 where the MPCR is the new synchronization byte)."

Regarding claim 18, Woodhead discloses "the method of claim 9 wherein processing comprises one of multiplexing, re-multiplexing, de-multiplexing, encoding, transcoding, scrambling, and de-scrambling (col. 18, lines 30-40 where the bitstream is at least de-multiplexed)."

Regarding claim 19, Woodhead discloses, "the method of claim 9 wherein the processing is performed in real-time (col. 1, lines 27-37 where the video stream and audio stream are inherently real-time when watching TV for instance)."

Regarding claim 20, Woodhead discloses "a system for providing a bitstream, the system comprising:

means for identifying timing information in the bitstream, the timing information describing a timing relationship of data in a portion of the bitstream (col. 18, lines 27-34 where the PCR is a timestamp representing a timing relationship for the payload of the packet and element 110 of figure 4 is used to identify that relationship);

means for processing the data in the bitstream portion in a manner that changes the timing relationship of the data (col. 18, lines 34-col. 19, lines 1-12 where the new timestamp MPCR is the changed timing relationship of the data and where element 126 of figure 5 is used to process the changing timing relationship); and

means for transmitting an output bitstream onto a first channel (col. 18, lines 13-21 where figure 5 shows the output means 124), the output bitstream including the timing relationship for data in the bitstream (col. 18, line 17-18 where the MPCRs are added to the packet)."

Regarding claim 21, Woodhead discloses, "the system of claim 20 further including means for receiving the first bitstream (figure 5, element 120 shows a receiving means), the means for receiving the first bitstream coupled to the means for processing the data (figure 5 shows that all the components of the dejitter device are coupled together)."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodhead et al. in view of Lawrence (U.S. Patent 6,323,789 B1).

Regarding claim 8, Woodhead discloses the system of claim 6. However, Woodhead lacks what Lawrence discloses, "the second interface is configured to transmit the output bitstream according to a DVB/ASI protocol (col. 1, lines 52-col. 2, lines 1-16)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the DVB/ASI protocol for transmission for the purpose of allowing the data to be encoded into a word with more bits. The motivation for encoding data to a higher bit count is so that more characters or additional functions can be implemented using the encoded data.

Regarding claim 15, Woodhead discloses the method of claim 14. However, Woodhead lacks what Lawrence discloses, "transmitting uses a DVB/ASI protocol (col. 1, lines 52-col. 2, lines 1-16)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the DVB/ASI protocol for transmission for the purpose of allowing the data to be encoded into a word with more bits. The motivation

for encoding data to a higher bit count is so that more characters or additional functions can be implemented using the encoded data.

Regarding claim 16, Woodhead and Lawrence discloses the method of claim 15. However, Woodhead lacks what Lawrence further discloses, "the transmitting utilizes an 8B/10B encoding scheme (col. 1, lines 52-col. 2, lines 1-16)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the 8B/10B encoding scheme for the purpose of allowing the data to be encoded into a word with more bits. The motivation for encoding data to a higher bit count is so that more characters or additional functions can be implemented using the encoded data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (703) 305-0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joshua Kading
Examiner
Art Unit 2661

August 9, 2004

KENNETH VANDERPUYE
PRIMARY EXAMINER